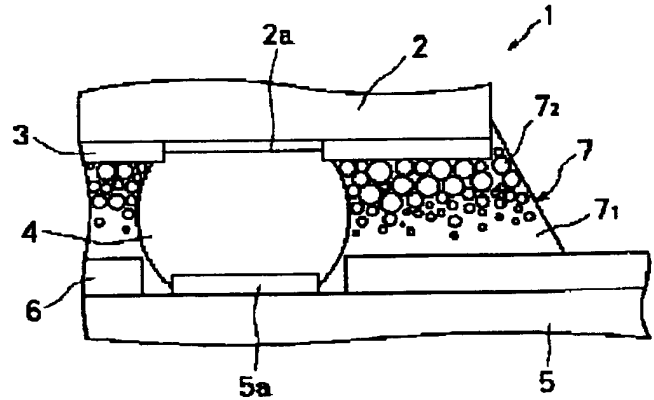


Patent Abstracts of Japan

TITLE : SEMICONDUCTOR DEVICE AND
PRODUCTION THEREOF



SOLUTION: A semiconductor device 1 subjected to flip-chip connected has a gap between the surface of a semiconductor chip 2 and the surface of a printed wiring board 5 filled with an insulating resin 7, e.g. an epoxy resin, where organic component 7₁ is mixed with silica tiller particles 7₂ at a content of about 65%. Content of the filter particles 7₂ is varied slightly from the semiconductor chip 2 side toward the printed wiring board 5 side so that the coefficient of thermal expansion is varied continuously. The coefficient of thermal expansion is matched with that of a bump 4 by the insulating resin 7. On the interface of bonding to the semiconductor chip 2, the coefficient of thermal expansion is matched by the insulating resin 7 the coefficient of thermal expansion of which is decreased by high content of the filter particles 7₂.

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